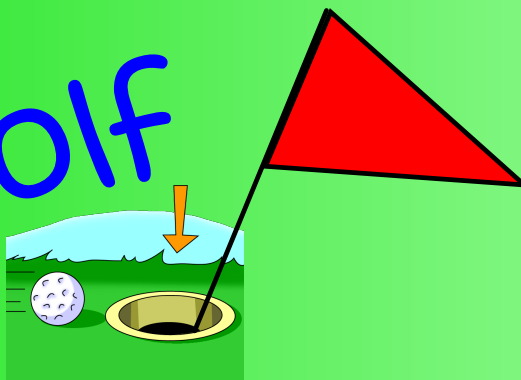


# Mini Golf



Can you get a hole-in-one?

Thank you,

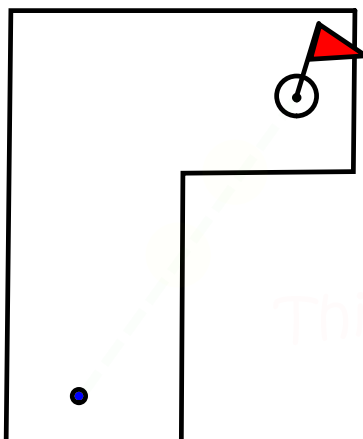


Nancy Norem Powell

nancynpowell@gmail.com

<http://smartboardsmarty.wikispaces.com>

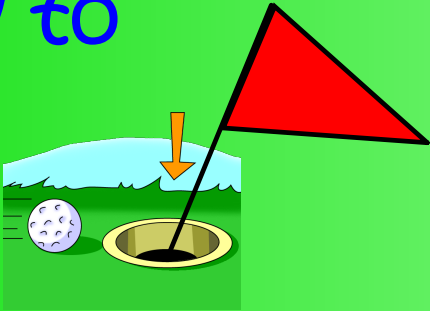
Try a direct shot



This won't work...



Let's try to



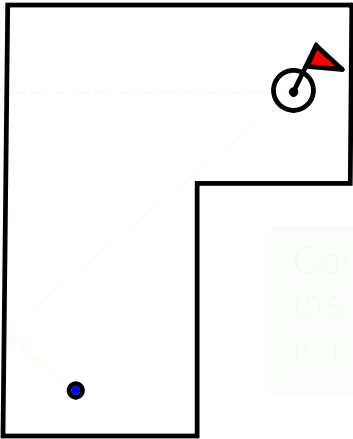
Bank off of one wall

Let's try this wall

Put your mira on it!

H1

Connect the ball to H1  
(make the line solid until  
you hit the wall and dotted  
after it).



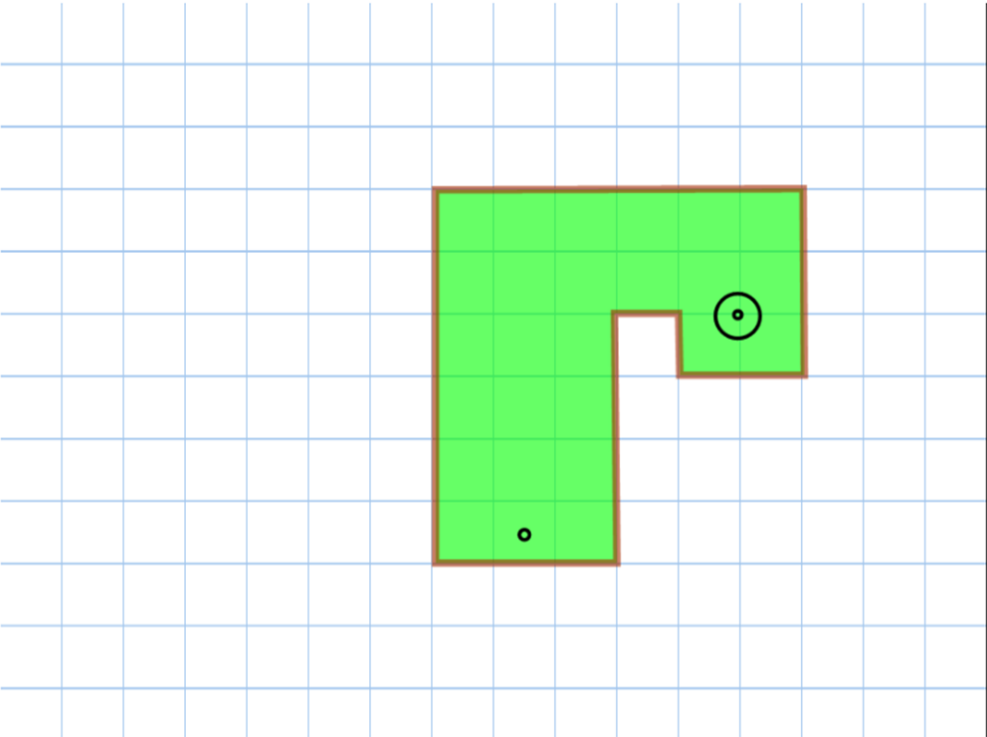
Look through the mira  
and see the flag's  
reflective image and  
mark it on your paper.  
Label it H1.

Connect the ball at  
the wall to H to put  
it in the hole.



Bank off of two walls

Let's use graph paper to learn to bank a ball off of two walls...



2. Reflect H2 across wall 1 and label it H1. (extend wall 1 and put your mira on it).

1. Reflect the hole across the 2nd wall and label it H2. (Put your mira on wall 2).

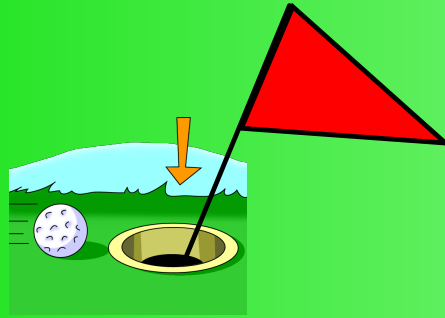
Bank off of two walls

4. Connect the ball at wall 1 to H2 (make the line solid until you hit the wall and dotted after it.).

3. Connect the ball to H1 (make the line solid until you hit the wall and dotted after it.).

5. Connect the ball at wall 2 to H to put it in the hole.

Bank off of two walls



# Bank off of three walls

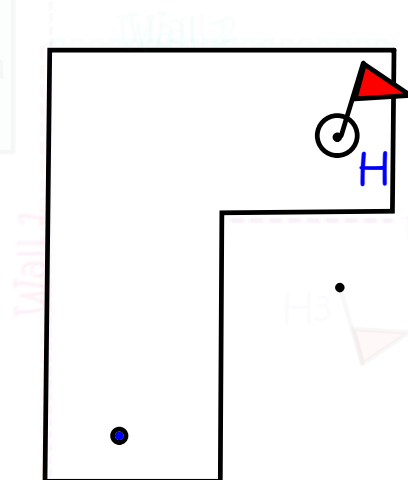


4. Extend wall 1. Reflect H2 across wall 1 and label it H1. (You will need to turn your paper to keep your mira between H2 and H1!)

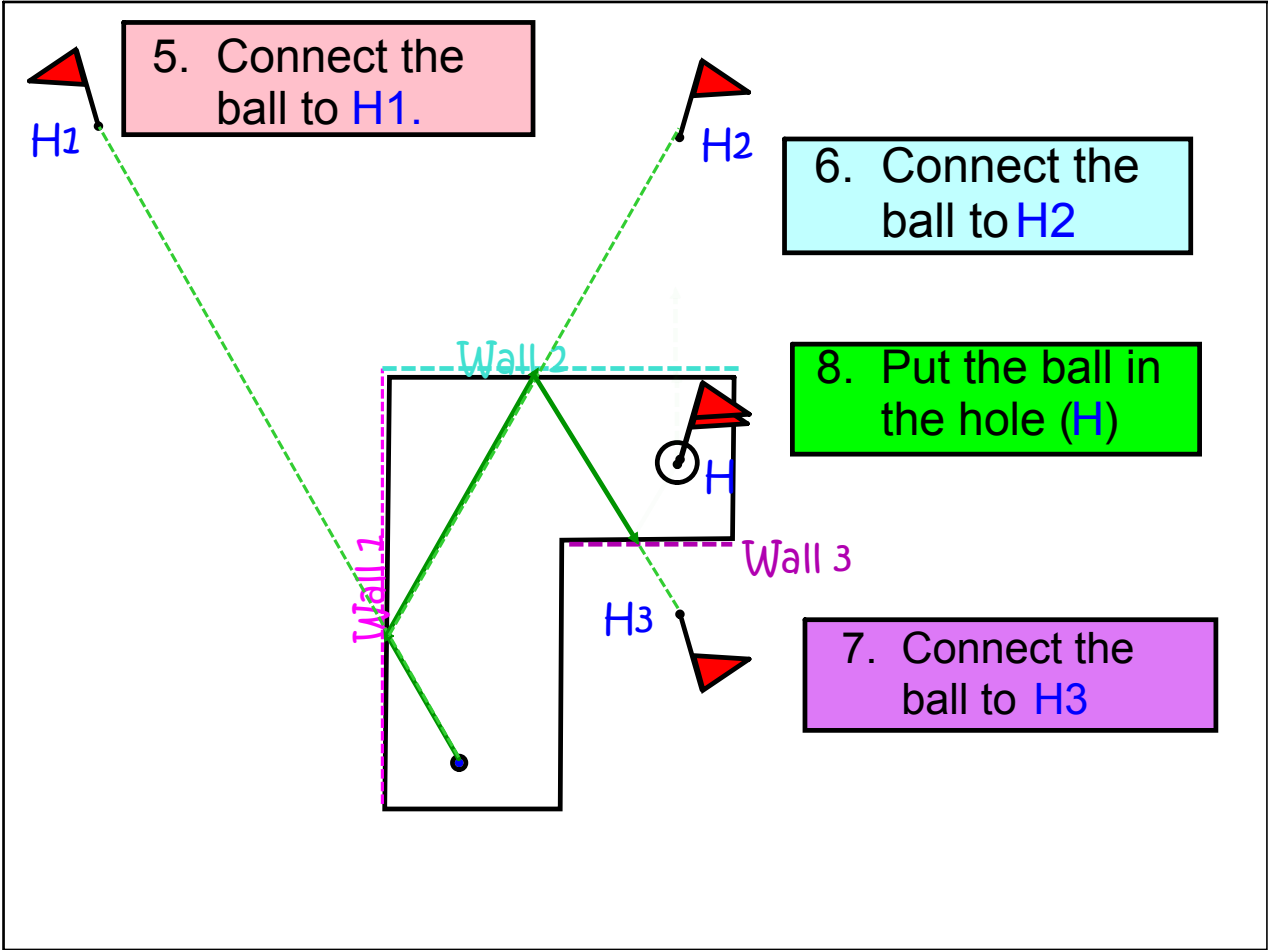
2. Reflect your hole across wall 3 and label it H3. (You will need to turn your paper upside down to keep your mira between you and your reflection!)



3. Reflect H3 across wall 2 and label it H2. (You will need to turn your paper back around to keep your mira between H3 and H2!)



1. Label your walls in the order you think will work to make a hole in one. These are the ones I decided on.



Bank off of one wall

A diagram of a mini-golf hole. A ball is at the bottom left, and a hole is at the top right. A green line shows a path from the ball to the hole, reflecting off the left wall. A yellow highlight is on the corner where the ball's path reflects off the wall. A red triangle indicates the ball's direction. A light blue label 'H1' is near the hole. A light blue label 'Wall 2' is on the left wall.

OOPs... the ball can't go through a corner!

This Hole-in-one doesn't work!

OOPs.... this isn't wall 4!

A diagram of a mini-golf hole with multiple walls and holes. A ball is at the bottom left, and a hole is at the top right. A green line shows a path from the ball to the hole, reflecting off Wall 2, Wall 3, and Wall 5. A red arrow points to the path. A light blue label 'H1' is near the hole. A light blue label 'H2' is near the ball. A light blue label 'H3' is near Wall 5. A light blue label 'H4' is near Wall 4. A light blue label 'H5' is near Wall 5. A light blue label 'Wall 1' is on the right wall. A light blue label 'Wall 2' is on the bottom wall. A light blue label 'Wall 3' is on the left wall. A light blue label 'Wall 4' is on the right wall. A light blue label 'Wall 5' is on the top wall.

If you're connecting a path to H4, it needs to hit wall 4. Does it?

This Hole-in-one doesn't work!

Golf Course A

Golf Course B

# Student Projects



Golf Course C

Golf Course D

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## Protractor Golf

● [Protractor Golf Instructions](#) (MS Word)

● [Protractor Golf Smart Board Demo](#) (Smart Notebook file)

## Mini Golf

● [Mini Golf Instructions for a Hole-In-One and Mini Golf Project Description](#) (MS Word)

● [Mini Golf PowerPoint](#) (MS PowerPoint)

● [Mini Golf Smart Board Demo](#) (Smart Notebook file)

● [3 Practice Holes](#) (MS Word)

## Math and the Smart Board

■ [Math on the Smart Board](#) (Smart Notebook file)

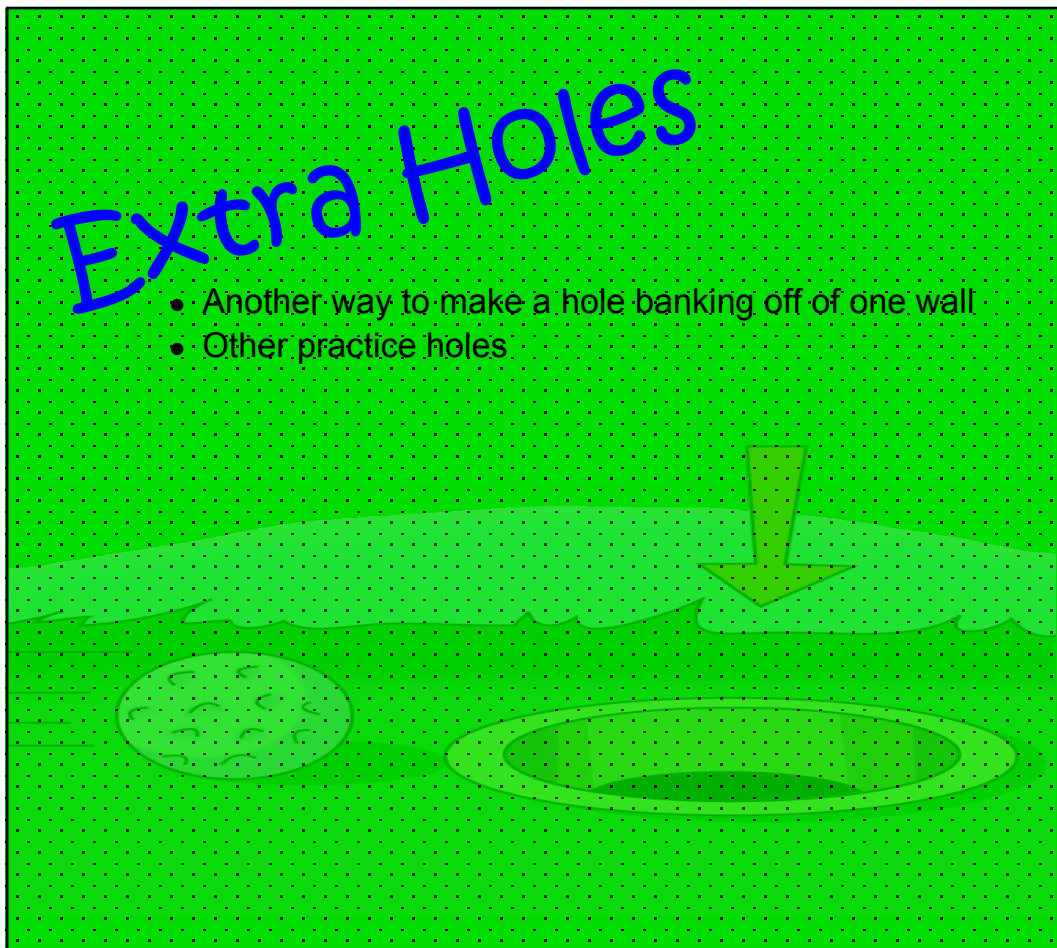
■ [Math Manipulatives for the Smart Board](#) (Smart Notebook file)

Questions and Comments? Email me at: [nancynpowell@gmail.com](mailto:nancynpowell@gmail.com)



### Your turn...

1. Using a straight edge and either graph paper or plain paper, create a mini golf hole. Mark the flag and the ball.
2. Using your mira, find a path banking it off of 1 wall (if possible) and make your path **RED**.
3. Using your mira, find a path banking it off of 2 walls and make your path **BLUE**.
4. Using your mira, find a path banking it off of 3 or more walls and make your path **GREEN**.



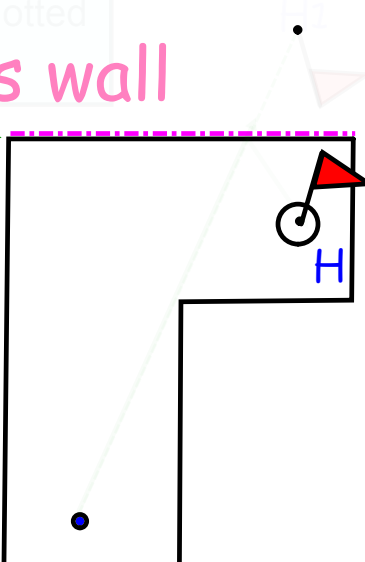
Connect the ball to H1  
(make the line solid until  
you hit the wall and dotted  
after it)

Bank off of one wall

Connect the ball at  
the wall to H to put  
it in the hole.

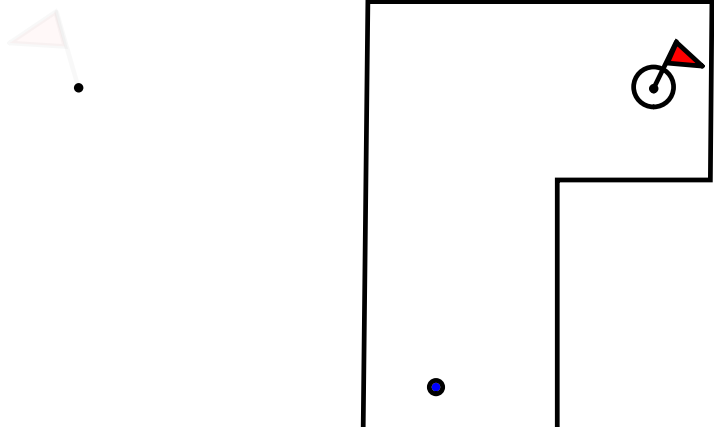
Let's try this wall

Put your  
mira on it!

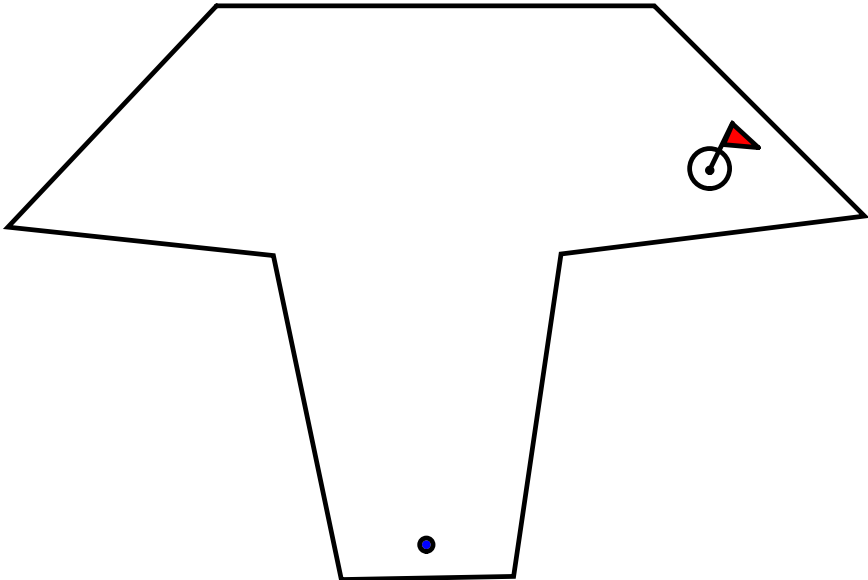


Look through the mira  
and see the flag's  
image and mark it on  
your paper.  
Label it H1.

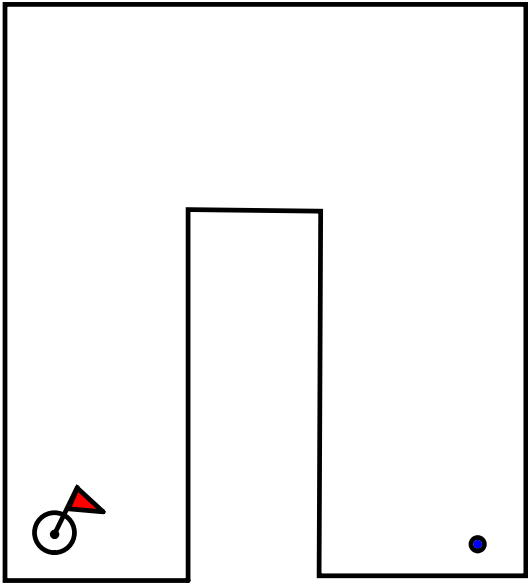
Practice Hole 1



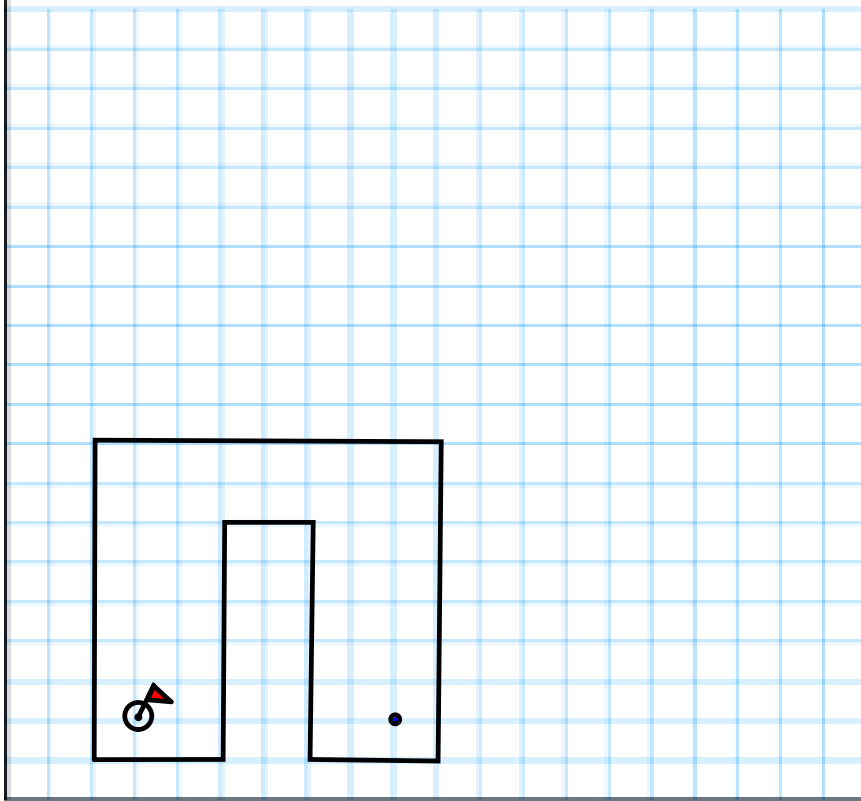
Practice Hole 2



Practice Hole 3



Practice Hole 4



Nancy Norem Powell  
Presented at  
Indianapolis NCTM, 2011  
nancynpowell@gmail.com

## Create Activities for Your SMART™ Board

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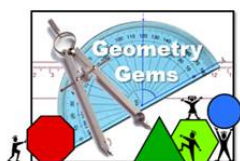
<http://www.teamvistech.com/index.php/create-activities-for-your-smart-board-single.html>



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